

REMARKS

The Examiner is thanked for the due consideration given the application. The specification has been amended to improve the language.

Claims 14, 15, 18, 20-23, 25 and 27 are pending in the application. Claims 16, 17, 19, 24 and 26 are cancelled by this amendment. Support for the amendments to independent claims 14 and 22 can be found in the cancelled claims and in the specification at page 12, lines 23-28. The claims depending upon independent claims 14 or 22 have been amended to improve their language in a non-narrowing fashion.

No new language is believed to be added to the application by this amendment.

The Specification

The Official Action asserts that the specification at page 12, lines 6-7 should refer to Figure 4. This passage in the specification has been amended to refer to Figure 4.

The Official Action asserts that the phrase "computer readable storage medium" in claims 20 and 21 lacks antecedent basis for the terminology in the specification. However, page 12, lines 23-28 of the specification states:

The method is implemented by means of a computer program product comprising the software code means for performing the steps of the method. The computer program product is run on processing means in a router or a server within an IP network. The computer program is loaded directly or from a **computer usable medium**,

*such as a floppy disc, a CD, the Internet etc.*  
(Emphasis added).

This disclosure provides full support to the "computer readable storage medium" and would be recognized as such by one of ordinary skill.

Rejection Under 35 USC §112, Second Paragraph

Claim 20 has been rejected under 35 USC §112, second paragraph as being indefinite. This rejection is respectfully traversed.

The Official Action asserts that the limitation "the software code portions" lacks sufficient antecedent basis. The comments in the Official Action have been considered, and claim 20 has been amended to be clear, definite and have full antecedent basis.

This rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Rejection Under 35 USC §101

Claims 14-19 and 22-26 have been rejected under 35 USC §101 as being directed to non-statutory subject matter. This rejection is respectfully traversed.

The Official Action asserts that the claims are drawn to abstract ideas and not things. However, independent claims 14 and 22 have been amended to be associated with specific things such as "a computer readable storage medium." The claims, as amended, thus clearly fall under the aegis of 35 USC §101.

This rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Rejections Based on CLARK et al.

Claims 14-17, 19-24 and 26 have been rejected under 35 USC §103(a) as being unpatentable over CLARK et al. (U.S. Patent 6,131,117) in view of DIEBBOLL et al. (U.S. Patent 5,886,643). Claims 19 and 26 have been rejected under 35 USC §103(a) as being unpatentable over CLARK et al. and DIEBBOLL et al., and further in view of TSENG et al. (U.S. Patent 6,119,159). Claims 18 and 25 have been rejected under 35 USC §103(a) as being unpatentable over CLARK et al. in view of DIEBBOLL et al., and further in view of TAKESHIMA et al. (U.S. Patent 6,985,960). Claim 27 has been rejected under 35 USC §103(a) as being unpatentable over CLARK et al. in view of DIEBBOLL et al., and further in view of GERMAIN et al. (U.S. Patent 6,900,822). These rejections are respectfully traversed.

The present invention pertains to creating a a map of available physical resources on the interface level within an Internet Protocol (IP) network. The present invention is exemplarily illustrated by Figure 4 of the application, which is reproduced below.

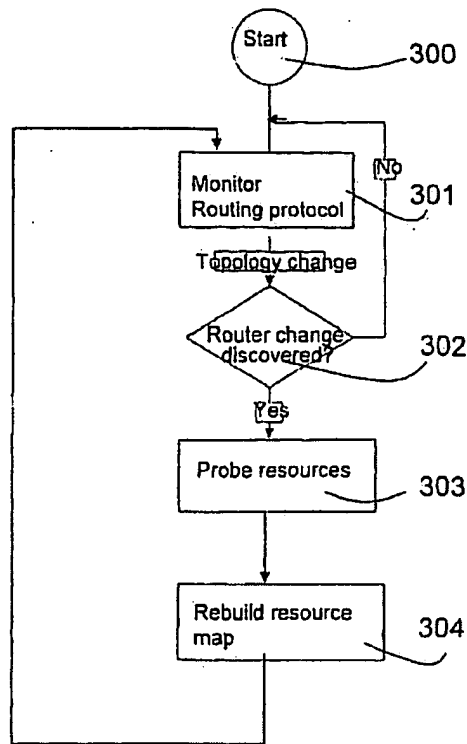


Fig.4

The present invention includes combining (303) a topology map of the IP network with resource information that comprises information about identities of IP addresses and quantity of IP addresses, and performing (304) a mapping between said IP addresses and a physical interface within said IP network, the mapping being performed by a resource manager collecting information from network elements by using Simple Network Management Protocol (SNMP). The method of the present invention may be implemented by a computer program product stored on a computer readable storage medium. See, e.g., claim 1.

CLARK et al. pertain to correlating logical names with IP addresses on internetworking platforms. The Official Action refers to the Abstract of CLARK et al., which discusses "an IP-centric map of the network." The Official Action refers to column 5, lines 8-10 of CLARK et al., which states: "The SNA-specific and NetBIOS-specific name information are thereafter overlaid on the IP-centric map to correlate the SNA and IP resources, and the NetBIOS and IP resources."

In CLARK et al., there is no map of available physical resources, and the map disclosed in CLARK et al. is not created by a topology-aware resource manager. The resources of CLARK et al. are not bandwidth resources as in the present invention. Instead, the resources in CLARK et al. refer to switch/router/interface etc.

Further, the use of SNMP is not the same as in the present invention. CLARK et al. use a mapping to understand the network from the SNA view and the LAN view. It focuses on the network entities and how they are connected. The SNMP in CLARK et al. is not used for analyzing bandwidth limitations along paths between different end points.

Nonetheless, at page 5 of the Official Action asserts that CLARK et al. teaches "creating a map of available physical resources on the interface level within an IP network." However, CLARK et al. do not map available physical resources, it instead maps nodes. See the Abstract, wherein it states "a series of

NetBIOS message flows among those IP routers coupled to the NetBIOS entities result in the acquisition of IP and NetBIOS address information of these resources at the routers." See also, CLARK et al., column 4, the paragraph beginning at line 13. In the present invention, physical resources is defined, for example, in paragraphs 0015 and 0016 of the Specification as published. The Office's interpretation of "resource" would further require that CLARK et al. discuss not mapping unavailable physical resource, which it clearly does not. Thus, CLARK et al. do not disclose "creating a map of available physical resources."

At page 5 of the Official Action, it is asserted that CLARK et al. disclose "combining (303) a topology map of said IP network with resource information that comprises information about identities of logical addresses and quantity of logical addresses," as in claim 14:

However, as discussed above, resource information in the present claims are not just the physical nodes but other attributes within the network.

DIEBOLL et al. fail to show any mapping and thus fail to address the deficiencies of CLARK et al. TSENG et al., TAKESHIMA et al. and GERMAIN et al. fail to address the deficiencies of CLARK et al. and DIEBOLL et al.

One of ordinary skill and creativity would thus fail to produce a claimed embodiment of the present invention from a

knowledge of CLARK et al. in any combination with the secondary references. A *prima facie* case of unpatentability has thus not been made.

These rejections are believed to be overcome, and withdrawal thereof is respectfully requested.

Conclusion

The prior art of record but not utilized is believed to be non-pertinent to the instant claims.

The objections and rejections are believed to have been overcome, obviated or rendered moot and no issues remain. The Examiner is accordingly respectfully solicited to place the application in condition for allowance and to issue a Notice of Allowability.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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